

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended): An apparatus comprising:
  - a substrate;
  - a ground plane on the substrate, the ground plane having a slot;
  - transmission lines lying over the slot; and
  - data processing agents each connected to one of the transmission lines configured such that a first data processing agent sources a current onto a first transmission line connected to the first data processing agent, inducing a transient return current on the ground plane, propagating energy of the transient return current to the slot, inducing a transient voltage pulse onto a second transmission line connected to a second data processing agent when the propagating energy encounters the second transmission line, and generating a binary digital signal in the second data processing agent from the transient voltage pulse received on the second transmission line.
2. (Original): The apparatus of claim 1 in which the slot is terminated.
3. (Original): The apparatus of claim 1 in which the transmission lines are terminated.
4. (Original): The apparatus of claim 1 in which the slot functions as a main bus trunk when excited.
5. (Original): The apparatus of claim 1 in which the data processing agents comprise processors.
6. (Original): The apparatus of claim 1 in which the data processing agents comprise chipsets.

7. (Original): The apparatus of claim 1 in which the transmission lines lie perpendicular to the slot.

8. (Original): The apparatus of claim 1 in which the data processing agents comprise signaling circuitry.

9. (Original): A method comprising:

inducing a transient return current on a reference plane in response to a driving agent sourcing a current onto a first transmission line, the current being representative of binary data; propagating energy of the transient return current to a slot in the reference plane; inducing a transient voltage pulse onto a second transmission line connected to a receiving agent when the propagating energy encounters the second transmission line; and generating a binary digital signal in the receiving agent from the transient voltage pulse received on the second transmission line.

10. (Canceled)

11. (Currently Amended): ~~The A method of claim 10 further~~ comprising:

in a bus, sourcing a current being representative of binary data on to a first line;

inducing a return current on a reference plane;

transferring energy of the return current to a slot in the reference plane;

inducing a voltage pulse on to a second transmission line from the energy in the slot; and generating a binary digital signal in a receiving agent from the voltage pulse.

12. (Canceled)

13. (Canceled)

14. (Original): The method of claim 11 in which the receiving agent is a processor.

15. (Currently Amended): An apparatus comprising:

a substrate;

a ground plane on the substrate, the ground plane having a slot;

parallel arranged transmission lines lying over the slot; and

data processing agents each connected to one of the parallel arranged transmission lines configured such that a first data processing agent sources a current onto a first transmission line connected to the first data processing agent, inducing a transient return current on the ground plane, propagating energy of the transient return current to the slot, inducing a transient voltage pulse onto a second transmission line connected to a second data processing agent when the propagating energy encounters the second transmission line, and generating a binary digital signal in the second data processing agent from the transient voltage pulse received on the second transmission line.

16. (Original): The apparatus of claim 15 in which the slot is terminated.

17. (Original): The apparatus of claim 15 in which the parallel transmission lines are terminated.

18. (Original): The apparatus of claim 15 in which the slot functions as a main bus trunk when excited.

19. (Original): The apparatus of claim 15 in which the data processing agents comprise processors.

20. (Original): The apparatus of claim 15 in which the data processing agents comprise chipsets.

21. (Original): The apparatus of claim 15 in which the data processing agents comprise signaling circuitry.